

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
16 October 2003 (16.10.2003)

PCT

(10) International Publication Number
WO 03/085448 A1

(51) International Patent Classification⁷: **G02F 1/1333**

(21) International Application Number: **PCT/KR02/01773**

(22) International Filing Date:
18 September 2002 (18.09.2002)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
2002/18506 4 April 2002 (04.04.2002) KR

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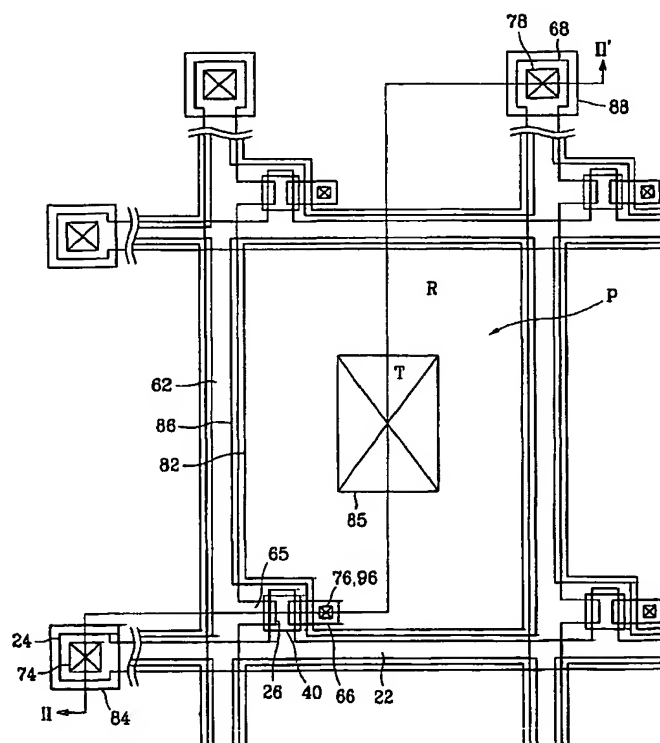
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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: METHOD FOR MANUFACTURING THIN FILM TRANSISTOR ARRAY PANEL FOR DISPLAY DEVICE



(57) Abstract: A gate wire including gate lines, gate electrodes, and gate pads and extending in a transverse direction is formed on a substrate. A gate insulating layer is formed thereafter, and a semiconductor layer and an ohmic contact layer are sequentially formed thereon. A conductive material is deposited and patterned to form a data wire inducing data lines intersecting the gate lines, source electrodes, drain electrodes, and data pads. A protective layer made of silicon nitride is deposited on the substrate, and an organic insulating layer made of a photosensitive organic insulating material is coated on the protective layer. The organic insulating layer is patterned to form an unevenness pattern on its surface and first contact holes exposing the protective layer opposite the drain electrodes. Subsequently, the surface of the organic insulating layer is treated using inactive gas such as Ar, and then the protective layer is patterned together with the gate insulating layer by photo etch using a photoresist pattern to form contact holes respectively exposing the drain electrodes, the gate pads, and the data pads. Next, indium-tin-oxide or indium-zinc-oxide is deposited and patterned to form transparent electrodes, subsidiary gate pads, and subsidiary data pads respectively connected to the drain electrodes, the gate pads and the data pads. Finally, a reflective conductive material is deposited and patterned to form reflecting films having respective apertures in the pixel area on the transparent electrodes.



European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

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